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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,940	01/29/2004	Hiroshi Harada	0425-1109P	1821

2292 7590 09/21/2006

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EXAMINER

KNOX, STEWART

ART UNIT	PAPER NUMBER
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3641

DATE MAILED: 09/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/765,940	HARADA ET AL.	
	Examiner	Art Unit	
	Stewart T. Knox	3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-3 and 5-7 in the reply filed on 7/7/2006 is acknowledged.

Specification

2. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

In particular, the Abstract of the present invention is directed to a method of making parts for an igniter, where the present invention is directed to the igniter itself.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

6. Several limitations recited in the claims are awkward and confusing as to what structure they are describing.

7. Claim 1 recites the limitations "the one surface of the header" in lines 3-4, "the header one surface" in line 6, and "the header surface" in line 6. There is insufficient antecedent basis for these limitations in the claim. Further, it is unclear what or where "the header one surface" is, or which surface of the header is "the header surface."

8. Claim 2 recites two portions of the electroconductive pin, one which is flat and opposite the header surface and the other which is not flat and not opposite the header surface. It is unclear how the term "opposite" is being used here, since either surface could be opposite or not opposite the header surface. A clearer structural relationship might be delimited by, for example, the terms abutting, adjacent, in contact with, etc.

9. Claim 5 recites the limitation "the other face side" in line 4. There is insufficient antecedent basis for this limitation in the claim.

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10. Claim 5 further recites that the heat generating body is sandwiched and held in one end portion of the electroconductive pin. It is unclear how it is sandwiched between only one element instead of more than one as recited in claim 1. For the purposes of examination, the claim will be treated as though the heat generating body is sandwiched between the end portion of the pin and the top of the header.

11. The preceding list is considered exemplary, and applicant should thoroughly review the claims for compliance. Where the specification uses similar terminology, an appropriate corresponding amendment should also be made for clarity.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1, 5, 6, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Duguet (6,408,758). Duguet discloses parts of an igniter including a header (10), a heat generating body (generally element 18, including elements 17, 25, 28, 29, see figure 2) and plural electroconductive pins (12, 13), wherein the electroconductive pin penetrates from the one surface of the header to the other, and the heat generating body is sandwiched between one end portion of the electroconductive pin and the header surface (see figure 1).

14. Claims 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Duguet. Duguet further discloses that the heat generating body is in contact with the pins (in channels 22

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and 23) and a heat generating portion that generates heat due to an electric current (resistive element 17 and 18) formed on a substrate, wherein the heat generating portion is S-shaped.

15. It is noted that the limitations “printed substrate” and “formed by etching” are product-by-process limitations. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps; “even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 777 F.2d 695, 227 USPQ 964. Therefore the printed substrate and formed by etching limitations are not pertinent in this instance to the patentability of this product claim.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duguet as applied to claim 1 above, and further in view of Narumi (6,354,217). Duguet discloses the claimed invention except for a heat generating body with a flat and not flat portion. Narumi teaches one end portion (23) of the electroconductive pin (12) that has a not flat surface (top) and a flat surface sandwiching the heat generating body (20, 21, 22) between itself and the header

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(20'). In addition, element 23 is considered a flange portion per claim 3. The flange/flat portion is provided in order to retain the electroconductive pin in the header (col. 3 lines 45-50). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the electroconductive pin of Duguet to include a flat portion or flange as taught by Narumi, since such a modification would provide the pin with additional means to remain secured in the header against excessive vibration or other disturbances.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lubbers (6,446,557) teaches a nail-shaped electroconductive pin.

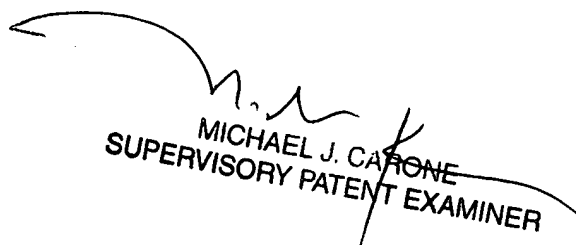
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stewart T. Knox whose telephone number is (571) 272-8235. The examiner can normally be reached on Monday through Thursday, 8:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on (571) 272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

STK


MICHAEL J. CARONE
SUPERVISORY PATENT EXAMINER